fuels. On the ordinant here, we have energy profit ratio. I talked a little bit ago about energy profit. This is how much energy we get out from what energy we put in. And if we go subzero, we may as well not do it if we are putting in more energy in than we get out unless what we are getting out has some qualities that are better than the qualities we are putting in.

And we are down here now with hydrogen. Hydrogen is down here. It is below zero. We are putting more energy in than we are getting out. But never mind, because hydrogen has real economic effectiveness in transport. We can put it in a vessel, and we can run our car with it.

□ 2350

Now, what you want, of course, is an alternative that has the highest energy profit ratio and has the highest economic effectiveness in transport, and what meets that are the giant oil fields. We do not have any of those in our country. Most of U.S. oil is way down here. It is really good in terms of economic effectiveness, but it takes a whole lot more energy to get it out than it takes over in Saudi Arabia, and the big, giant oil fields are up here, and there never were any of those in our country, they are in the Middle East. You can see here coal. You get a meaningful amount of energy out of coal but, boy, it is not very good in economic effectiveness. You have to convert it into something else. Photovoltaics in 1995, they were way down here, and now we have moved them up to here. Hydro and coal-fired and nuclear are down here, and this tells you the qualities of the replacements that we are going to need to find for fossil fuels if we are going to be able to maintain anything like the economic activity and the lifestyle that we now have.

The next chart is an interesting one. It shows us coal, and people will tell us, do not worry about energy, we have 250 years of coal left in our country. That is not forever, by the way, but that is a very long time. That is true. At current use rates, we have 250 years of coal. But, if we are going to use more coal, we are going to have an increased use of coal, and if we use coal only with a 2 percent growth per year, and, Mr. Speaker, we are going to have to use a much greater growth rate than that to make up for the slide down Hubbard's Peak in oil, but only 2 percent growth per year, compounded, it now shrinks to 85 years. And, since you cannot use coal for a lot of things like running your car, you have to convert to a gas or liquid; well, you have now made that conversion, you are now down to only about 50 years. The coal is there, it is dirty, it produces a lot of pollutants. You either put up with the pollutants or you pay a lot of energy and money, and we will not worry about money, we should worry about energy, to clean up the coal.

The next chart is an interesting one. The top shows you the subject that I spent a full day down here at the National Press Club a couple of weeks ago on, and that is ethanol. On the right here it shows the energy you get from oil. You put in 1 million BTUs and you get out 1.23 million BTUs. I am sorry. With an input of 1.3 million, you get out 1 million BTUs. Obviously, you are going to have to use some of the energy and the oil to transport it and to refine it and to deliver it and so forth.

Now, the chart on the left here was given to me by our Department of Energy. I am told by the experts that this is wildly optimistic, but this is at least this group's view of what we can get out of it. The Energy Conference had these two experts who said that you need to put in more energy than you will get out. And even this optimistic assessment says that to get a million BTUs out, you need to put in three-fourths that amount. Now, of course, the extra energy comes from the sun, which, by the way, is where the oil came from too, because the oil and gas all come from things that grew a very long time ago with sun.

On the bottom here is a really interesting chart. In this little pie-shaped thing here, it shows all of the energy that goes into producing a bushel of corn. And notice that nearly half the energy, Mr. Speaker, that goes into producing a bushel of corn comes from nitrogen. And that nitrogen fertilizer is made from natural gas, so that is natural gas energy there. And notice almost every other slice of this pie, we are talking about fossil fuel energy to grow the seed to haul, to supply the water, many of the chemicals come from oil, custom work, putting oil in the combine, natural gas that is liquefied or used as natural gas for drying your crop, electricity that is used for a lot of things; gasoline itself, diesel, the lime and the phosphate and the pot ash are all mined using fossil fuels, so essentially, for every piece of this pie, fossil fuels are used.

Now, what do we need to do? This next chart, which is our last chart, shows us the challenge. And, Mr. Speaker, what we need is a focus that is equivalent, if you are old enough to remember the Manhattan Project, it is equivalent to the Manhattan Project, or putting a man on the moon. That was a real challenge. And I think we need to challenge the American people in a very similar way. We have to do something about our dependence on foreign oil. If you do not think there is going to be such a thing as peak oil, and I think we are probably here. I hope not. I hope I am wrong, I hope these world experts are wrong. But if we are right, then we face a very bumpy ride. But even if you do not believe that as a problem, you have to believe that getting two-thirds of our oil from overseas is a big national security risk. By the way, we need to do exactly the same thing to reduce the national security risk that we need to do to transition. We need to buy time, conservation, and efficiency. We need to use that very wisely. If you do the wrong thing, you may end up making the problem even worse.

I would encourage my colleagues, Mr. Speaker, to look into Jevons Paradox. Very interesting paradox. For some problems, the harder you work, the worse the problem gets. There will be real benefits to doing this. We will have technologies we can sell to the world, not just we, but the world, so we need to make this transition. We will create a lot of new jobs. It will be challenging to our people.

Whether we like it or not, Mr. Speaker, we are going to be a role model. We use 25 percent of the world's oil. We are a role model. We are going to be a role model. We need to step up to that.

Mr. Speaker, I would like to challenge our government and our people to step up to this challenge. There are those who believe that we cannot do this. One writer begins his article by saying, dear reader, civilization as we know it will end soon. His name is Mat Savinar, you will find him with a google search of ''peak oil.'' Please read the article. You will be genuinely frightened, having finished the article.

I am not as pessimistic as Mat Savinar. I think that the American people, because we have met every other challenge, I think we can meet this challenge. But, Mr. Speaker, we are not likely to meet the challenge if we do not know there is a problem. So I am very appreciative for this opportunity to speak about this problem, and we will be back again, because this problem is not going to go away, and we need to talk more and more about the solutions and the problem.

LEAVE OF ABSENCE

By unanimous consent, leave of absence was granted to:

Mr. BUTTERFIELD (at the request of Ms. PELOSI) for today and September 8 on account of a death in the family.

Mr. FORD (at the request of Ms. PELOSI) for today on account of attending a funeral.

Mr. MCNULTY (at the request of Ms. PELOSI) for today on account of personal reasons.

Mrs. EMERSON (at the request of Mr. DELAY) for September 6 and today on account of helping with Hurricane Katrina relief.

SPECIAL ORDERS GRANTED

By unanimous consent, permission to address the House, following the legislative program and any special orders heretofore entered, was granted to:

(The following Members (at the request of Ms. WOOLSEY) to revise and extend their remarks and include extraneous material:)

Mr. DEFAZIO, for 5 minutes, today.

Ms. DELAURO, for 5 minutes, today.

Mr. EMANUEL, for 5 minutes, today.

Mr. CUMMINGS, for 5 minutes, today.

Mr. BROWN of Ohio, for 5 minutes, today.